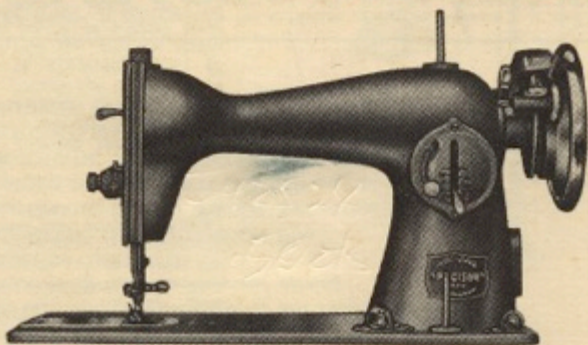


INSTRUCTION MANUAL

for use and care of

ELECTRIC



SEWING MACHINE

WITH
E-Z-ADJUST
STITCH SELECTOR

FOREWORD

TO SET THE NEEDLE

THE BOBBIN CASE

TO WIND THE BOBBIN

TO THREAD THE BOBBIN CASE

THREADING THE MACHINE

TO PREPARE FOR SEWING

THE DROP FEED

TO REMOVE LINT

TO REGULATE LENGTH OF STITCH

TENSIONS

TO OIL THE MACHINE

SEWING HINTS

SEWING MACHINE PARTS



WELCOME

Welcome to the growing family of happy owners of the new E-Z-Adjust Stitch Regulator sewing machine. You now have one of the finest full-size sewing machines made, with all these wonderful features:

- E-Z-ADJUST STITCH REGULATOR with its large E-Z-Adjust dial stitch-length indicator.
- INSTANT REVERSE-SEWING by just flicking a lever.
- DROP-FEED for embroidery and darning.
- BUILT-IN DARNER.
- NUMBERED THREAD TENSION DIAL.
- AUTOMATIC BOBBIN WINDER. Self-adjusting.
- HINGED PRESSER FOOT that rides over pins, seams, etc.
- AUTOMATIC TENSION RELEASE.
- NOTCHED SHUTTLE HOOK that prevents thread from tangling.
- SNAP-OUT RACE for convenience in cleaning.

This machine is precision-built for a lifetime of sewing pleasure. It will require a minimum amount of servicing, and will give the maximum in satisfaction. Needles, bobbins and other parts are interchangeable with those of other first class manufacturers.

This manual provides all the information needed to operate the machine and to care for it properly. Hence, read through the book thoroughly so that you may become familiar with the behavior and operation of the machine. Follow all instructions closely.

Several service calls may be necessary to adjust this machine to your individual needs, and to eliminate any stiffness which may be present in a new machine. So do not hesitate to call on your Authorized Dealer for any adjustment needed during the initial break-in period.

TO REPLACE THE NEEDLE

NOTE:
Use standard 15X1 needles
available at any sewing
machine store.

To replace the needle, raise the needle bar to its highest point by turning the balance wheel (Fig. 3) **TOWARD YOU** by hand. Loosen the needle clamp screw (A) on the right hand side and the needle clamp will open, allowing the old needle to fall out.

Remove the old needle and slide the new needle up (**FLAT SIDE TOWARD THE BALANCE WHEEL**) as far as it will go. When the needle hits the stop it is in position correctly. Now fasten the needle clamp securely. For best results change needles frequently.

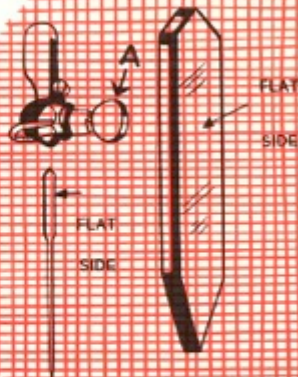


Fig. 3

NEEDLES AND THREAD

Never use a bent needle, nor one with a blunt point, since this causes imperfect stitches and may cause the needle to break.

The size of the needle should conform to the size of the thread and both should be suitable to the material. Use a needle sufficiently large to permit the thread to pass freely through the eye. In general sewing, use the same size thread in the bobbin as is used on top.

THE BOBBIN CASE

IMPORTANT

In the following operations the needle must always be **ABOVE** the surface of the machine. Raise the needle by turning the balance wheel **TO-WARD YOU** by hand.

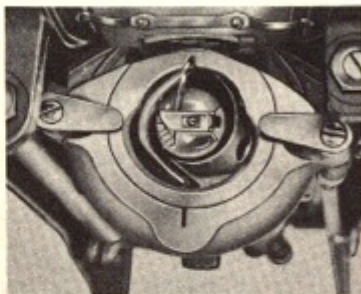


Fig. 2

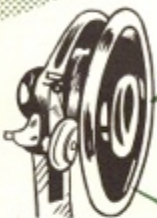
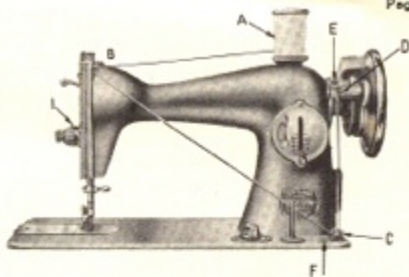
REMOVING THE BOBBIN CASE

Pull out the slide plate. With left thumb and forefinger, open hinged latch (Fig. 2) at the front of the bobbin case and hold securely you withdraw bobbin case from around the holder post. When held in above manner the bobbin will not fall out of the bobbin case.

INSERTING THE BOBBIN CASE

After winding a fresh bobbin and threading the bobbin case (see pages 5 and 6), hold the bobbin case latch with left thumb and forefinger, (as explained above) to prevent the bobbin from falling out. Keeping the protruding finger top side toward the delivery eye, press the bobbin case around the holder post until the finger enters the delivery eye. When in correct position a stud on the holder post will catch the latch mechanism holding the bobbin case firmly in place. This operation is easy—**NEVER FORCE IT**. The three or four inches of thread hanging free from the bobbin case will be brought up through the needle plate stitch hole as shown on page 8.

TO WIND THE BOBBIN



Stop
motion
knob

The
balance
wheel

Fig. 3

Loosen the balance wheel by turning the stop-motion knob toward you (Fig. 3) and place a spool of thread on the spool pin

(A). Pass the end of the thread through the notch on front upper left corner of machine (B), and through the disk at the bottom right of the machine from below (C). Then wind the bobbin seven or eight times with the free end of the thread, and put the threaded bobbin on the spindle of the bobbin winder (D).

Press the bobbin on the spindle with the left hand, and make sure that it is pressed to the end of the spindle, until the slot in the bobbin fits into the pin on the spindle. Exert a little pressure between the bobbin and the rubber wheel until the latter presses right against the hub of the balance wheel, and the clasp (E) retains the winder in position. Turn the balance wheel toward you by hand, and proceed to operate the rheostat control, as in sewing until bobbin is almost full. Then break off the thread, and detach the bobbin from the spindle.

Should the thread not wind evenly on the bobbin, loosen the screw (F) which holds the tension bracket in position on the bed of the machine, and slide the tension bracket to the right or left, as desired then tighten the screw.

TO THREAD THE BOBBIN CASE



Hold the bobbin case between the left thumb and forefinger with the slot up. With 5 or 6 inches of thread trailing in the palm, hold the bobbin between the thumb and first two fingers of the right hand. Fig. 4

Insert the bobbin into the bobbin case and pull the trailing thread into the slot, down and to the left until it enters the delivery eye under the tension spring. Fig. 5

There should be a slight tension on the thread as it is pulled through the delivery eye and the bobbin should unwind freely. The tension may be increased by turning the tension screw to the RIGHT and decreased by turning the screw to the LEFT. Fig. 6

Fig. 4



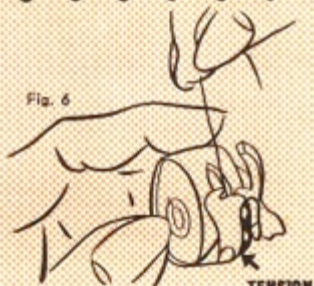
SLOT

Fig. 5



SLOT

Fig. 6

TENSION
SCREW



Turn the balance wheel by hand towards you until the take-up lever (A) is at its highest point. Place a spool of thread on the spool pin on the top right of the machine: pass the thread through the notch (B) on the back left of the machine; down between the tension disks (C) from the back; up over the tension thread guard (D) from behind; down into the hook of the take-up spring (E) up and through the hole in the end of the take-up lever (A) from the back; down through the eyelet (F) in the front of the face plate, and into the wire thread guide (G) at the lower end of the needle bar; then from left to right through the eye of the needle (H). Draw about 4 inches of thread through the eye of the needle with which to commence sewing.

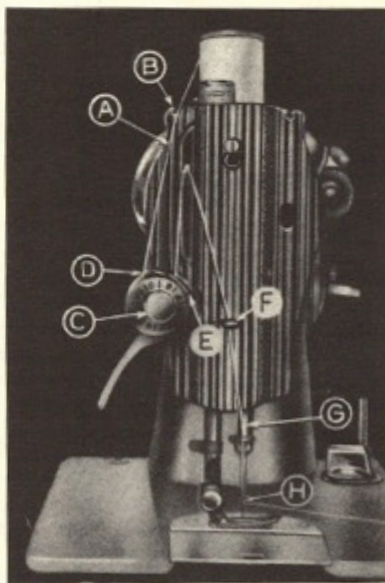


Fig. 7

TO PREPARE FOR SEWING

IMPORTANT NOTICE

Never operate the machine without material under the presser foot. If this is not strictly adhered to, your machine will lock, and cannot be operated until the thread is cleaned out of the race.

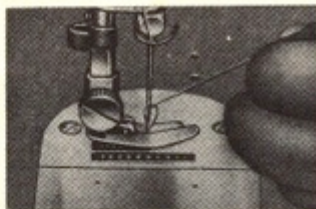


Fig. 8



Fig. 9

Pick up the thread as follows: Holding the loose end of the needle thread in your left hand, turn the balance wheel toward you by hand until the needle moves down and up again to its highest point. Pull the needle thread gently, and the bobbin thread will come up with it in the form of a loop through the needle hole. With your finger, pull this loop until the end of the thread appears. (If the bobbin thread does not rise, check to see if at least 5 or 6 inches of bobbin thread is hanging loosely from the bobbin case.) Then draw both ends of the thread back under the presser foot and through the toes of the presser foot.

THE DROP FEED

FOR EMBROIDAERY & DARNING

This machine is fitted with both a dropfeed mechanism and a built-in darning device which enable you to darn, sewrips and patches, and do embroidery and applique works.

TO WORK THE DROP-FEED, simply turn the drop-feed knob to the right to EMBR. - a quarter-turn. The feed dog then is cut of the way. For regular sewing turn the knob back to its normal position (NORM)

If you want to sew the fine fabric, silk etc., you will get good result to press the darning at medium height, and the drop feed knob in silk position.

TO START SEWING

Place the material to be sewn beneath the presser foot, and lower the presser foot lever. Insert needle into material by turning the balance wheel toward you, from top to down, by hand. Regulate stitch to desired size, and start sewing. Do not try to help the feeding of the work by pulling the material, as this may bend the needle and cause it to become blunt or break. As the machine feeds without any assistance, it is sufficient merely to guide the fabric gently by hand in the direction you want it to be sewn.

IT IS ADVISABLE TO TEST THE TENSION AND THE STITCH LENGTH ON TWO PLIES OF SCRAP MATERIAL BEFORE STARTING TO SEW THE ACTUAL GARMENT.

TO REMOVE THE WORK

Stop the machine by releasing the pressure on the rheostat control and stopping the balance wheel with the right hand. Raise the needle to its highest point and raise the presser foot by lifting the presser foot lever with either hand. Now draw the sewn fabric back and to the left about eight inches and cut the trailing threads.

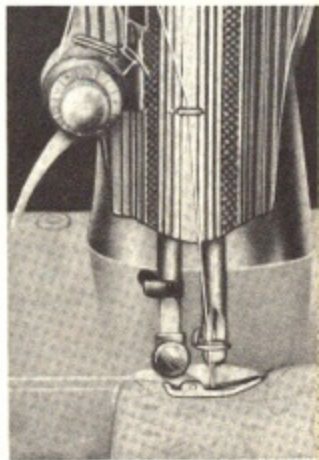
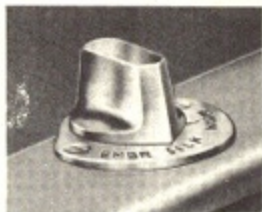
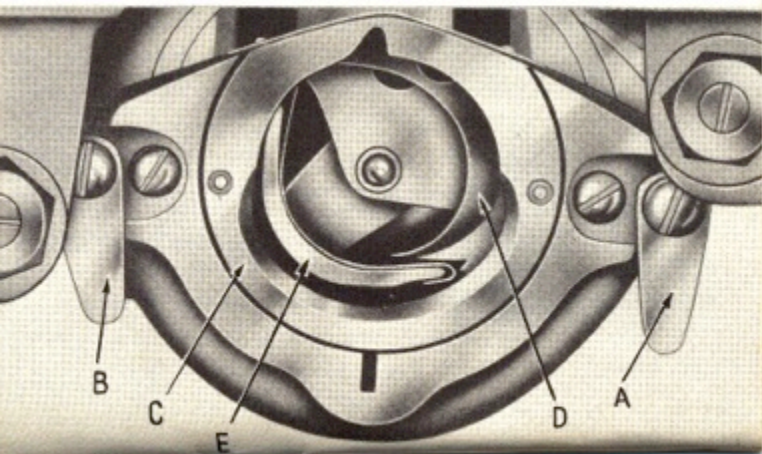


Fig. 10

To Remove Accumulated Lint or Thread from "E-Z Clean" Race



1. Turn balance wheel by hand until needle is at its highest point.
2. Remove bobbin and bobbin case.
3. Turn knob (A) one half turn toward you.
4. Turn knob (B) one half turn away from you.
5. Remove retaining ring (C), and hook (D) by grasping axle of hook (D).
6. Remove accumulated lint and thread from retaining ring, hook and race body.
7. Replace hook (D) in race body, with axle facing out, forming a perfect circle with Driver (E).
8. Replace retaining ring (C), polished side out, so that both grooves are under knobs (A) and (B).
9. Lock retaining ring with knobs (A) and (B).
10. Replace bobbin and bobbin case, and commence sewing.
11. DO NOT ATTEMPT TO FORCE ANY OF THE ABOVE OPERATIONS.





**NOTE: NEVER SEW OR USE
MACHINE IN ZERO OR NEU-
TRAL POSITION.**

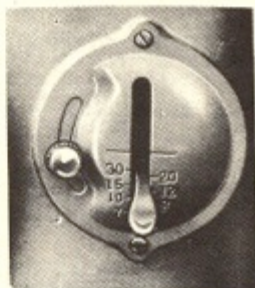


Fig. 12

The length of stitch and reversal of stitching, both are regulated by Regulator Lever fixed on the surface of the Arm close to pulley.

The feeding action is augmented and consequently the stitch length widened by pushing the Regulator Lever downward which is to be kept lightly in position with the screw on the left side of the Round metal plate, which must be moved over to suit the purpose.

On the other hand the length of stitch shortens as the Regulator Lever is pushed upward but below the center of the Round plate.

Therefore the desired length of stitch is obtained in either the normal or reversed state by pinning tight to the exact position, the screw attached thereon, which would guarantee a uniform length of stitch.

To sew in reverse, first reduce the speed of pulley and before finishing sewing stop the wheel by hand. Then raise the Regulator Lever upward from the center line. This Lever is brought up to any point where a desired length of stitch is required and secured in place tight by the screw which may follow the regulator upward or downward.

For perfect stitching, the tension on the upper and under threads should be equal, and just sufficiently strong to lock both threads in the center of the work (A).



(A) Fig. 13

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, making an imperfect stitch (B).



(B) Fig. 14

If the tension of the bobbin thread is too tight, or if that on the needle thread is too loose, the bobbin thread will lie straight along the under side of the material, making an imperfect stitch (C).



(C) Fig. 15

REGULATING THE NEEDLE TENSION: Minor imperfections in the stitch can usually be corrected by yarning the needle tension only.

Thumb
Nut

To increase the tension, turn the thumb nut (diagram) clockwise; to lessen the tension, turn the nut in the opposite direction. The tension adjusts from 0 to 9 in one 360° turn, with 0 being the lightest tension and 9 being the highest. All adjustments should be made gradually, not abruptly, and the required tension setting will vary with the size of thread being used. A little practice will make **instant** tension adjustments possible. All adjustments should be made while the **presser foot is down** since an automatic release does not permit adjustments to be made when the foot is up.

If a perfect stitch cannot be obtained by adjusting the needle thread tension, it may be necessary to adjust the bobbin thread tension.

The machine is correctly adjusted before leaving the factory and checked and readjusted before the dealer delivers it to you.

A careful regulation of the tensions on this machine will assure you of the finest seams that mechanical design will produce.

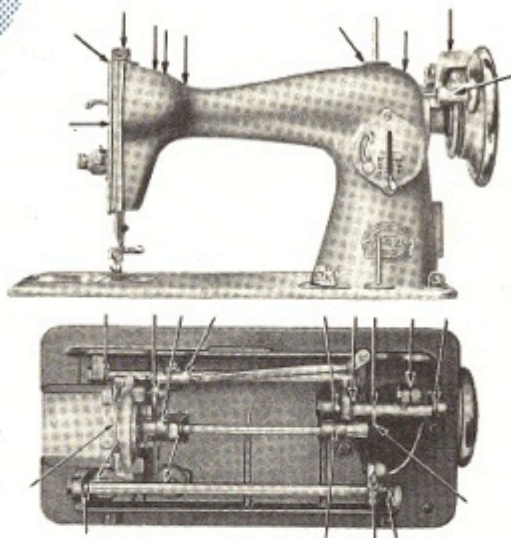


Fig. 16

A sewing machine never needs grease. All moving parts which come in contact with others, must be covered with a film of oil, and should not be allowed to become dry. Oil, when necessary, should be applied at the points indicated by the arrows in Fig. (16), a drop of oil being sufficient at any one place. Oil should be applied freely at all contact points on the underside of the machine. A few drops of oil in the bobbin race will help your machine to run freely.

When oiling, insert the oil can nozzle well into the oil holes.

After oiling, run the machine rapidly for a few minutes, so that the oil may penetrate into the bearings. For the proper care of your machine oil frequently. Neglecting to do this tends to shorten the life of the machine, and may cause trouble and annoyance.

NOTE: USE SEWING MACHINE OIL ONLY.

SEWING HINTS



SKIPPED STITCHES. May be caused by a bent or blunt needle; or by incorrect setting of the needle; or the wrong size needle; or by a thread too heavy for the size of the needle.

SEE THAT THE PRESSER FOOT is snug against the presser bar and securely clamped by the screw so that the needle will pass through the opening in the foot without any interference.

BREAKING NEEDLES. Usually due to pulling on the work, causing the needle to get out of line and strike the throat plate, thus breaking or bending the needle. May be due to presser foot or attachments not being securely fastened to presser bar. Be sure to use correct size needle and thread for material.

BREAKING THE UPPER THREAD. May be caused by:

- (1) Incorrect threading.
- (2) Not bringing up under thread correctly.
- (3) Upper tension too tight.
- (4) Needle imperfect, or set incorrectly.
- (5) Needle rubbing against attachments or presser foot.
- (6) Needle eye too small for thread.
- (7) Starting the machine at full speed.
- (8) Starting without take-up lever at highest point.

BREAKING THE LOWER THREAD. May be caused by:

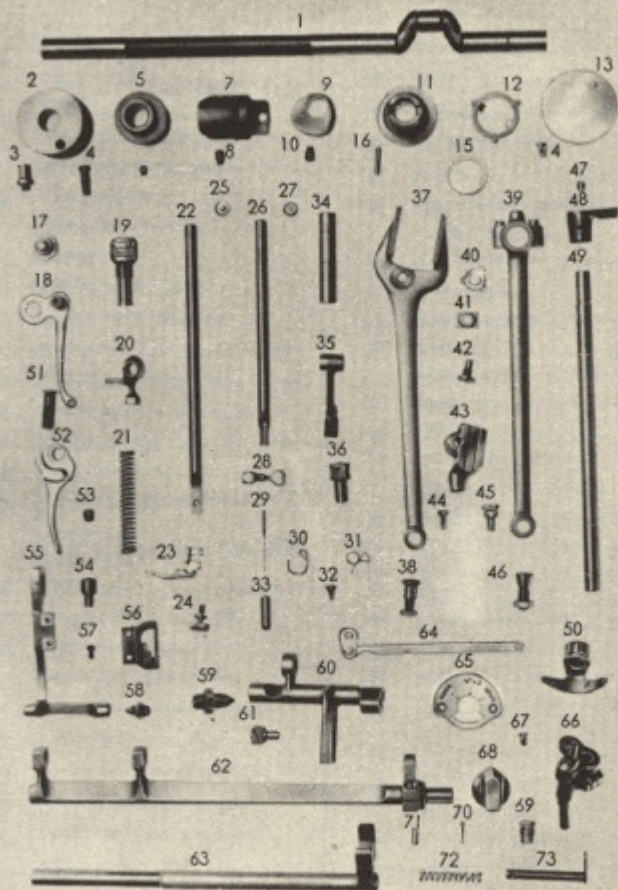
- (1) Incorrect threading of bobbin case.
- (2) Too tight a tension.
- (3) Bobbin wound too full to revolve freely.
- (4) Not bringing up under thread correctly.
- (5) Hole in the needle plate rough, caused by needle striking the plate.
- (6) Dust or lint in bobbin.

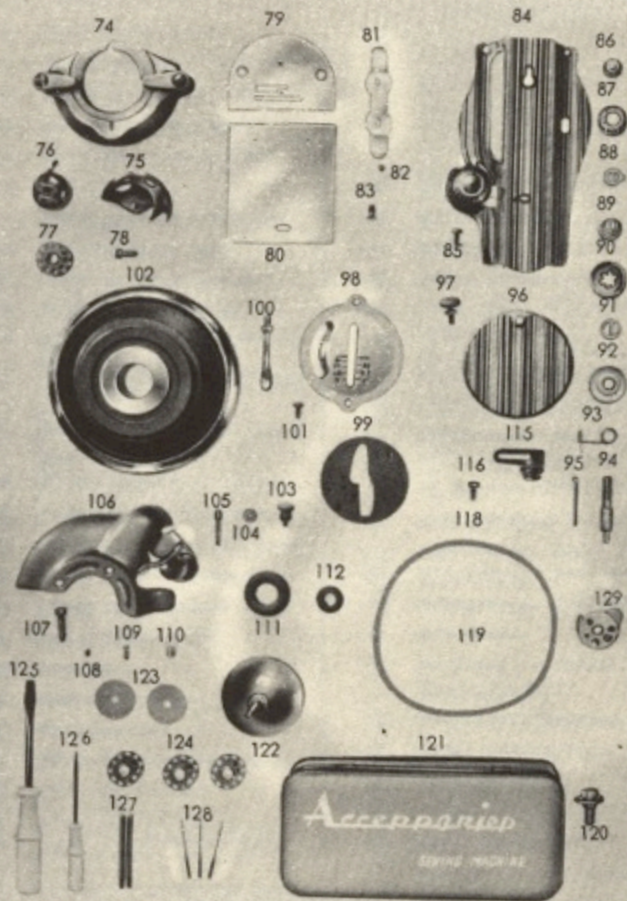
UNEVEN STITCHES. May be caused by:

- (1) Presser foot not resting evenly on material.
- (2) Feed not high enough.
- (3) Too short a stitch.
- (4) Pulling the cloth.
- (5) Too fine a needle with too coarse or poor a thread.



SEWING MACHINE PARTS





SEWING MACHINE PARTS

Key No.	Parts Name	Key No.	Parts Name
1	Main Shaft	31	Thread Cutter
2	Thread Take Up Cam	32	Set Screw for Needle Bar Thread Guide
3	Stud Screw and Nut for Thread Take Up Cam	33	Taper Pin for Lower Shaft Crank
4	Thread Take Up Cam Screw	34	Needle Bar Bearing
5	Main Shaft Bearing	35	Needle Bar Connecting Link
6	Main Shaft Bearing Set Screw	36	Needle Bar Stud
7	Counter Balance	37	Forked Connecting Rod
8	Counter Balance Set Screw	38	Feed Forked Connection Hinge Screw with Nut
9	Feed Cam	39	Crank Rod
10	Feed Cam Set Screw	40	Rock Washer
11	Balance Wheel Bushing	41	Slide Block for Feed Regulator
12	Washer for Stop Motion Screw	42	Stud Screw for Feed Regulator Slide Block
13	Clamp Stop Motion Clamp Screw	43	Feed Regulator
14	Stop Screw for Clamp Screw	44	Set Screw for Hinged Stud Screw
15	Cap for Thread Take Up Lever Hole	45	Hinged Stud Screw for Feed Regulator
16	Taper Pin for Balance Wheel Bushing	46	Crank Rod Taper Screw with Nut
17	Thread Take Up Lever Stud Screw	47	Set Screw for Lower Shaft Crank
18	Thread Take Up Lever Assembly	48	Lower Shaft Crank
19	Darner	49	Lower Shaft
20	Presser Bar Spring Bracket	50	Shuttle Driver with Spring
21	Presser Spring	51	Presser Bar Lifter Pin
22	Presser Bar	52	Presser Bar Lifter
23	Presser Foot	53	Set Screw for Presser Bar Lifter Pin
24	Presser Foot Thumb Screw	54	Slide Roller and Stud for Drop Feed Bracket
25	Oil Cap for Needle Bar	55	Feed Bar
26	Needle Bar	56	Feed Dog
27	Oil Cap for Arm	57	Feed Dog Set Screw
28	Needle Clamp	58	Taper Center Screw for Feed Bar
29	Needle		
30	Needle Bar Thread Guide		

Key No.	Parts Name
59	Taper Center Screw with Nut
60	Oscilating Rock Shaft
61	Lower Shaft Crank Slide Block
62	Horizontal Feed Rock Shaft
63	Vertical Feed Rock Shaft
64	Drop Feed Connecting Rod
65	Drop Feed Plate
66	Drop Feed Bracket Assembly
67	Drop Feed Plate Screw
68	Drop Feed Knob
69	Drop Feed Rod Bearing
70	Cotter Pin
71	Hinge Stud for Drop Feed Connecting Rod
72	Drop Feed Rod Spring
73	Drop Feed Knob Rod
74	Shuttle Race
75	Shuttle Hook
76	Bobbin Case
77	Bobbin
78	Shuttle Race Screw
79	Needle Plate
80	Slide Plate
81	Slide Plate Spring
82	Spring Screw
83	Needle Plate Set Screw
84	Face Plate Assembly
85	Face Plate Screw
86	Upper Thread Tension Knob
87	Tension Dial
88	Cap Washer for Tension Dial
89	Upper Thread Tension Spring
90	Cap for Tension Dial
91	Thread Release Washer
92	Tension Disc


Key No.	Parts Name
93	Thread Take Up Spring
94	Tension Stud
95	Tension Release Pin
96	Arm Slide Plate
97	Arm Slide Plate Screw
98	Stitch Dial Plate
99	Limitting Plate for Feed Regulation
100	Stitch Dial Lever and Nut
101	Stitch Dial Plate Screw
102	Balance Wheel
103	Fixing Screw and Washer for Limitting Plate
104	Washer for Fixing Screw
105	Ball Oiler for Bobbin Winder
106	Bobbin Winder Assembly
107	Bobbin Winder Set Screw
108	Name Plate Screw
109	Tag Pin
110	Head Set Screw for Head Hinge
111	Bobbin Winder Rubber Wheel
112	Cord Bushing
115	Bobbin Winder Tension Bracket Assembly
116	Set Screw for Bobbin Winder Tension Bracket
117	Motor Fasten Screw and Winder
119	V Belt
121	Accessories Box
122	Oiler
123	Felt
124	Bobbin
125	Driver (Large)
126	Driver (Small)
127	Spool Pin
128	Needle



*Designed
for*



*Home
Sewing*



Pleasure!